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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,241	09/02/2003	Masashi Tatsukawa	Q77262	1875
23373	7590	09/08/2004	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			ALEMU, EPHREM	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p>Application No.</p> <p>10/652,241</p>	<p>Applicant(s)</p> <p>TATSUKAWA ET AL.</p>	
	<p>Examiner</p> <p>Ephrem Alemu</p>	<p>Art Unit</p> <p>2821</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9-02-03 &amp; 7-22-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumann et al. (US 5,975,730) in view of Du et al. (US Pub. No. 2004/0042212).

Re claims 1 and 2, Neumann discloses a vehicle headlamp (Fig. 1) operable to form a predetermined light distribution pattern of a low beam comprising:

a plurality of lamp units (20, 40, 60, 61, 70, 90) employing incandescent or discharge lamp as light sources (Fig. 1; abstract; Col. 3, lines 17-18),

wherein the plurality of lamp units include at least two types of lamp units (20, 40) selected from a lamp unit of projector type (20) which is constructed to reflect light output to be converged in forward direction from a light source by means of a reflector and to radiate the reflected light ahead of a lamp by way of a projection lens provided ahead of the reflector, from a lamp unit of direct projection type which is constructed to radiate direct light output from the light source ahead of the lamp by way of a condenser lens provided forward of the light source (Fig. 2; abstract; Col. 3, lines 8-32; Col. 5, lines 49- Col. 6, line 21; wherein a cutoff line (i.e. light-dark boundary 54, 56, 85) forming unit (20) is constructed according to the projection principle); and

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a lamp unit of reflection type (40) which is constructed to reflect light output from the light source ahead of the lamp by means of the reflector (Figs. 1, 3; abstract; Col. 3, lines 33-54).

Neumann does not disclose the light source being a semiconductor light emitting elements.

However, Du discloses a light source (10) including a light emitting semiconductor device (12) for producing substantially plane wave light beam that is suitable for vehicle headlight for the purpose of improving a reliability and catastrophic failure of a headlight caused by failure of incandescent halogen or discharge lamps (Fig. 1; abstract; Page 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the light source of Neumann's with light emitting semiconductor device for the purpose of improving a reliability and catastrophic failure of a headlight caused by failure of incandescent halogen or discharge lamps as taught by Du.

Re claims 3-7, Neumann discloses a vehicle headlamp (Fig. 1) operable to form a predetermined light distribution pattern of a low beam comprising:

a plurality of lamp units (20, 40, 60, 61, 70, 90) employing incandescent or discharge lamp as light sources (Fig. 1; abstract; Col. 3, lines 17-18),

wherein the plurality of lamp units include at least two types of lamp units (20, 40) selected from a lamp unit of projector type (20) which is constructed to reflect light output to be converged in forward direction from a light source by means of a reflector and to radiate the reflected light ahead of a lamp by way of a projection lens provided ahead of the reflector, from a lamp unit of direct projection type which is constructed to radiate direct light output from the light source ahead of the lamp by way of a condenser lens provided forward of the light source

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(Fig. 2; abstract; Col. 3, lines 8-32; Col.5, lines 49- Col. 6, line 21; wherein a cutoff line (i.e. light-dark boundary 54, 56, 85) forming unit (20) is constructed according to the projection principle); and

a lamp unit of reflection type (40) which is constructed to reflect light output from the light source ahead of the lamp by means of the reflector (Figs. 1, 3; abstract; Col. 3, lines 33-54).

Neumann does not disclose the light source being a semiconductor light emitting elements.

However, Du discloses a light source (10) including a light emitting semiconductor device (12) for producing substantially plane wave light beam that is suitable for vehicle headlight for the purpose of improving a reliability and catastrophic failure of a headlight caused by failure of incandescent halogen or discharge lamps (Fig. 1; abstract; Page 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the light source of Neumann's with light emitting semiconductor device for the purpose of improving a reliability and catastrophic failure of a headlight caused by failure of incandescent halogen or discharge lamps as taught by Du.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Natsume (US 6,619,825); Thominet (US 6,565,247); Hashigaya (US 6,511,215); Harbers et al. (US 6,406,172); and Turnbull et al. (US 5,803,579); also teach similar inventive subject matter. teach similar inventive subject matter.

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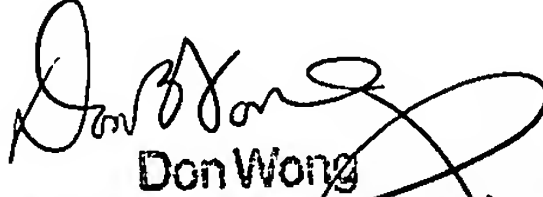
***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA  
9-03-04

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800